UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ALABAMA SOUTHERN DIVISION

01 SEP 28 PM 4: 02 U.S. DISTRICT COURT N.D. OF ALARAMA

| JOE J. HUDGENS and PHYLLIS HUDGENS, | } } |
|--------------------------------------|--------------------------------|
| Plaintiffs, | } } |
| | CASE NO. CV 99-B-2042-S |
| v. | } |
| BELL HELICOPTER TEXTRON and DYNCORP, | } } -NITEDED |
| Defendants. | SEP 2 8 2001 |

MEMORANDUM OPINION

Currently before the court is the Motion for Summary Judgment on all claims filed by defendant Bell Helicopter Textron, Inc. ("Bell" or "defendant"). The present action arises out of claims by Joe J. Hudgens ("plaintiff" or "Hudgens"), a civilian employee of the United States Army, who was injured in a crash of a Bell UH-1H helicopter in Shelby County, Alabama, on May 1, 1999, when its vertical fin separated from the helicopter, causing it to crash. Plaintiff's wife, Phyllis Hudgens, ("Hudgens's wife") claims damages for loss of consortium.

Plaintiffs¹ contend that defendant was negligent in the design, manufacture, and sale of the UH-1 helicopter ("Huey"), (Compl. at ¶ 4), that defendant violated the Alabama Extended Manufacturers Liability Doctrine ("AEMLD"), (Compl. at ¶ 8), that

¹ Hudgens and his wife will be collectively referred to as "plaintiffs."

defendant failed to warn plaintiff of the dangers associated with the Huey, (Compl. at ¶ 10), and that defendant is in breach of express and implied warranties of merchantability, (Compl. at ¶ 11).

Bell asserts that it is entitled to summary judgment on plaintiff's charges of negligence, wantonness, violation of the AEMLD, and breach of warranty under the government contractor defense. (Brief in Support of Bell Helicopter Textron's Motion for Summary Judgment ("Def.'s Brief") at 6.) Bell further contends that it is entitled to summary judgment on plaintiffs' post-sale failure to warn claim because it informed the Army, well before the date of this accident, that cracks had been found in similar tail fins, that it should modify the vertical fin so that the danger area could be easily inspected, and that it should make frequent inspections for fatigue cracks. (Def.'s Brief at 7.) Upon consideration of the record, the submissions of the parties, the arguments of counsel, and the relevant law, the court is of the opinion that Bell's Motion is due to be granted.

I. Factual Summary

The helicopter involved in the accident made the basis of this suit ("accident helicopter") was manufactured by defendant and delivered to the Army as a UH-1H on October 5, 1972.² Bell originally installed the tailboom, of which the vertical fin and spar involved in the accident ("accident vertical fin and spar") were integral parts, on a different helicopter also manufactured in 1972. (DX N at 47-49.)³ The accident was

² The Army assigned the accident helicopter to a medical evacuation unit and redesignated it as a UH-1V in October 1980. It will be referred to as a UH-1H throughout this Memorandum Opinion.

³ Defendants filed a Designation of Evidentiary Materials in Support of Motion for Summary Judgment by Bell Helicopter Textron, Inc., with attached exhibits. All references to the submitted evidence will be referred to as ("DX") followed by the corresponding exhibit letter.

examined by representatives of the Analytical Investigation Branch of the Army at Corpus Christi Army Depot ("CCAD") and Bell's Field Investigations Group. (DX A at Bates 4-12; DX A at Bates 14-30.) Both CCAD and Bell concluded that the vertical fin separation resulted from a fatigue crack originating in the outer edge of the No. 2 rivet hole in the forward spar of the vertical fin. (DX A at Bates 5; DX A at Bates 16.) Both CCAD and Bell noted that patches and repairs had been made to the vertical fin indicating previous damage and repair. (DX A at Bates 6; DX A at 20.) The CCAD Report noted that the patches in the vertical fin "may have permitted transfer of additional stress to the failed area, hastening its demise." (DX A at Bates 9.) The Army found no evidence to suggest a mechanical or material defect, CCAD specifically noted the absence of "material deficiencies" and "other mechanical or material defects." (DX A at Bates 5, 6, 11.)

II. Summary Judgment Standard

Summary judgment is appropriate when "there is no genuine issue as to any material fact and . . . the moving party is entitled to a judgment as a matter of law." Fed.R.Civ.P. 56(c). The party asking for summary judgment bears the initial burden of showing that no genuine issues exist. See Clark v. Coats & Clark, Inc., 929 F.2d 604, 608 (11th Cir. 1991); see Adickes v. S.H. Kress & Co., 398 U.S. 144, 157 (1970). Once the moving party has met his burden. Rule 56(e) requires the nonmoving party to go beyond the pleadings and show that there is a genuine issue for trial. See Celotex Corp. v. Catrett, 477 U.S. 317, 324 (1986). A dispute is genuine "if the evidence is such that a

reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

In deciding a motion for summary judgement, the judge's function is not to "weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial." *Id.* at 249. Credibility determinations, the weighing of evidence, and the drawing of inferences from the facts are left to the jury, and therefore the evidence of the nonmovant is to be believed and all justifiable inferences are to be drawn in his favor. *See id.* at 255. Nevertheless, the nonmovant need not be given the benefit of every inference but only of every *reasonable* inference. *See Brown v. City of Clewiston*, 848 F.2d 1534, 1540 n.12 (11th Cir. 1988).

III. Discussion

A. The Government Contractor Defense

The Supreme Court outlined the government contractor defense in *Boyle v. United Techs. Corp.*, 487 U.S. 500 (1988). The Court reasoned that the liability of an independent contractor performing its obligation under a procurement contract implicates "uniquely federal" interests similar to those implicated by the liability of government officials and is therefore governed by federal law. *Id.* at 505-06. The Court found that liability on the part of government contractors may create a "significant conflict' between federal interests and state law." *Id.* at 511. The Court further reasoned that "[i]t makes little sense to insulate the Government against financial liability for the judgment that a particular feature of military equipment is necessary when the Government produces the equipment itself, but not when it contracts for the production," in which case

the added costs of liability would be passed through to the government anyway. *Id.* at 511-12.

In *Boyle*, the Court adopted the Government Contractor Defense in a lawsuit against the manufacturer of a military aircraft. Government contractor immunity is derived from the government's immunity from suit where the performance of a discretionary function is at issue. *See id.* at 511. The Court established three preconditions for this defense:

Liability for design defects in military equipment cannot be imposed, pursuant to state law, when (1) the United States approved reasonably precise specifications; (2) the equipment conformed to those specifications; and (3) the supplier warned the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States.

Id. at 512. The Court reasoned that selection of an appropriate design for military equipment "often involves not merely engineering analysis but judgment as to the balancing of many technical, military and even social considerations, including specifically the trade-off between greater safety and greater combat effectiveness." Id. at 511.

In *Harduvel v. General Dynamics Corp.*, 878 F.2d 1311, 1317 (11th Cir.1989),

Justice Lewis Powell, sitting by designation, held that the government contractor defense is a matter of federal common law, and that its application cannot be defeated by a plaintiff's choice of words in stating his claim or by state law. Justice Powell noted that "[i]f a defect is one inherent in the product or system that the government has approved, it will be covered by the defense." *Id.* The undisputed evidence before the court

establishes the existence of the three preconditions for invocation of the government contractor defense in this case.

(1) The Specifications Requirement

The first requirement of the government contractor defense requires that the government approve "reasonably precise specifications," Id. at 1320.4 Both the accident helicopter and the helicopter containing the failed vertical fin and spar were produced under a contract between Bell and the Army, dated January 8, 1971, ("the procurement contract"). (DX C.) The procurement contract required the helicopters be "manufactured and furnished" in accordance with a Model Specification 205-947-135 for the UH-1H. dated March 2, 1970. (DX C at Bates 35.) The Model Specification required that Bell construct the helicopters in accordance with a "General Arrangement" drawing, ("the top drawing."). (DX D at Bates 61; DX N at 41-42.) The top drawing identified the drawings for all components in the helicopter, (DX N at 42-43), including the drawings for the Tailboom, the Vertical Fin, and the Fin Spar ("the Vertical Fin Drawings"). (DX N at 43-46.) These Vertical Fin Drawings were approved in the early 1960's for the UH-IH-1D Helicopter by Ted Hall, ("Hall") an Army Engineer stationed at the Bell plant. (DX N at 43-46, 50.) Bell was required to build the tailboom, vertical fin, and spar in accordance with these Vertical Fin Drawings. (DX N at 46.)

The UH-1H was one of a series of helicopters (known as "Hueys") that evolved from the XH-40 experimental helicopter project that began in the mid-1950's. (DX N at

⁴ In concluding that the government had approved "reasonably precise specifications," the court noted the government "conducted an extensive review of the aircraft, including its electrical system, examining specifications, drawings, and blueprints." *Id.* at 1320. The court noted further that design of the aircraft was the result of "continuous back and forth" between the Air Force and General Dynamics. *Id.*

14.) The Army began using the first Huey, the HU-1A, in the late 1950's. (DX O at 27.) In the early 1960's, the Army ordered the larger and more powerful D model. (DX N at 50.) Shortly thereafter, the Army ordered the H model, which was to be produced under the Specification and Drawings applicable to the D Model, but with a more powerful engine. (DX N at 50-51, 61.) All of these helicopters were designed for normal utility activity, (DX L at 92), and tested to be operated in accordance with a flight spectrum established by the Army, (DX L at 22). In all, Bell delivered to the military services in excess of 10,000 Hueys. (DX N at 58.) Between 1962 and 1970, Bell delivered to the Army in excess of 6,000 UH-1D's and UH-1H's, which were used extensively in the Vietnam conflict. (DX N at 54-55.)

In 1970, the Army required Bell to develop a Detail Specification specifically for the UH-1H. (DX N at 52, 60.) This 1970 Detail Specification, which was specifically incorporated into the Procurement Contract, (DX C at Bates 34; DX N at 53), expressly required that Bell use the 1962 Hall-approved Vertical Fin Drawings, for the tailboom, the vertical fin and spars, (DX N at 53-54). Therefore, Bell was obligated to produce the tailboom, vertical fin and spar pursuant to the 1962 Vertical Fin Drawings for the D Model. (DX N at 54.)

Bell employee William T. Wilson, ("Wilson") who was employed in the Bell office which administered contracts between Bell and the Army when the Procurement Contract was executed, (DX N at 38), testified about the elaborate and careful process of review followed by the Army before it accepted any specifications and drawings prepared by Bell, including the 1970 Specifications for the UH-1H. (DX N at 23-24, 31, 61.) Under this process, Bell's proposed specifications were sent to and carefully reviewed by

various Army technical offices with technical expertise in engineering and maintenance. (DX N at 23-24, 31.) After review and comment by these offices, a lengthy meeting was convened in which representatives of Bell and the Army carefully studied and discussed the specifications paragraph by paragraph, with each Army specialty having input at the meeting. (DX N at 55-57.) Bell then revised the specifications as directed by the Army. (DX N at 57.) After these revisions were resubmitted to and studied by the various Army offices, Bell and the Army would engage in another review process until there were specifications and drawings with which the Army was satisfied. (DX N at 57-58, 60-61.)

During the period in question, the Army had approximately 200 people stationed in Bell's main Administration Building and its engineering representatives had cubicles in Bell's Engineering Department "so they could be in real time flow of the drawings." (DX N at 23-24; DX O at 210.) Wilson testified that the Army would sign and approve drawings after it was satisfied that they met its requirements. (DX N at 31.) Wilson further stated that the review process by the Army was "far from a rubber stamp." (DX N at 58.)

The undisputed evidence shows that the Army's approval of the Detail Specification and Drawings for the UH-1H was made only after the Army's extensive study of the specifications, drawings, and meetings with Bell. *See Harduvel*, 878 F.2d at 1320 (design process consisted of "continuous back and forth"). Furthermore, the Army had the benefit of approximately seven years' experience in the successful operation and maintenance of approximately 6,000 UH-1D and UH-1H models with the identical tailboom specified and approved by the Army's Hall in 1962. (DX N at 43-44, 51-52,

54.) Therefore, Bell has demonstrated that the Huey's design process required the government approve "reasonably precise specifications."

(2) Compliance with the Specifications

The second precondition of the government contractor defense requires that the equipment conform to the specifications approved. *Boyle*, 487 U.S. at 512. Plaintiffs argue that the helicopter did not conform to the contract because the failed spar did not have "infinite life" of 25,000 hours. (Plaintiffs' Brief in Opposition to Motion for Summary Judgment by Bell ("Pl.'s Brief") at 7.) This argument is specifically contradicted by the following language in § 3.24 of the Detail Specification: "All components including the propulsion system with the exception of the engine shall be deemed to be capable of 1,000 hours of operating time between teardown inspection and/or overhaul." (DX D at Bates 64.) The Army's Ralph C. Vemmer ("Vemmer"), an aerospace engineer with the Army's Aviation and Missile Command (AMSCOM), who was assigned the duty of sustaining the Army's UH-1 fleet, testified that the Army had its own structural fatigue engineers who performed retirement life calculations. (Supp. DX W at 162.)⁵

Forrest Edward Holcomb ("Holcomb"), an experienced UH-1 mechanic, for DynCorp, (Supp. DX U at 13-15), testified that the vertical fin spar on the UH-1 was a "condition item" that has infinite life as long as "it meets the serviceability standards that

⁵ Defendant, Bell Helicopter Textron, Inc. submitted Supplemental Designation of Evidentiary Materials in Support of Motion for Summary Judgment by Bell Helicopter Textron, Inc., with attached exhibits. All references to this evidence will be referred to as ("Supp. DX") followed by the corresponding exhibit letter.

⁶ Plaintiffs have also asserted claims against DynCorp. The Army had contracted with DynCorp to service the helicopter fleet.

are established for that component." (Supp. DX U at 122.) Stephen D. Monaco, another aerospace engineer with AMSCOM, testified that, for years, the Army examined components that were not easily inspected by conducting depot level inspections at CCAD, in which the helicopter would be stripped down to "bare bones" and its structure thoroughly inspected. (Supp. DX T at 79, 91-98; *see also* Supp. DX S at 50-51; 55-57.) The Army, however, discontinued its bare bones depot inspection and overhaul at CCAD in the early 1990's. (Supp. DX T at 97.)

Both the accident helicopter and the helicopter onto which the accident tailboom had been originally installed were manufactured under the Procurement Contract, (DX N at 46-48), and the Army accepted both helicopters as being in conformity with that contract. (DX G at Bates 70; DX H at Bates 71; DX N at 48-50.) Plaintiffs produced no evidence to indicate that the helicopters were not in conformity with the contract. The CCAD and Bell Accident Reports revealed no such nonconformity. The Army's years of accepting and using the UH-1 and UH-1H product line, including the accident helicopter and accident tailboom for several years, support the conclusion that the tailboom, when delivered to the Army, complied with the drawings, specifications, and procurement contract. See Kerstetter v. Pacific Scientific Co., 210 F.3d 431, 435 (5th Cir. 2000) ("extensive acceptance and use of the product following production, is evidence that the product line generally conformed with the government approved specifications.") (citing In re Air Disaster at Ramstein Air Base, Germany, 81 F.3d 570, 575 (5th Cir. 1996)).

(3) Compliance with Warning Requirement

The third precondition to the government contractor defense requires the contractor to warn the United States about the dangers in the use of the equipment that were known to the supplier but not to the United States. *Boyle*, 487 U.S. at 512. In *Kerstetter v. Pacific Scientific Company*, 210 F.3d at 436, the court held that "[t]he Government Contractor Defense does not require a contractor to warn the Government of defects about which it only should have known. 'After *Boyle*, a government contractor is only responsible for warning the Government of dangers about which it has actual knowledge.'" (emphasis added) (quoting *Trevino v. General Dynamics Corp.*, 865 F.2d 1474,1487 (5th Cir. 1989)).

Retired Bell Employee, Anton J. Stier, ("Stier") who worked in Bell's Product Support Engineering Office from 1969 until his retirement in 1998, (DX O at 10), testified:

It was normal practice before that time and since I was in the office that we would provide the Army folks, which were right down the hall from us ... copies of service bulletins, of tech bulletins, of service letters and that the Army folks were very well aware of the problems we were having in the commercial fleet ... and we communicated. They would tell us what problems they were finding. We would tell them what problems we were finding.

(DX O at 210-211.)

Both Stier and Wilson described the free and unimpeded flow of information between Bell's representatives and the Army engineers and maintenance people who were located in close proximity to Bell's people. (DX N at 23-24; DX O at 209-211.)

The testimony of the Army's Vemmer supports the testimony of Wilson and Stier.

(Supp. DX W at 29-31.) The Army knew of the dangers in the UH-1H tailboom fin spar.

(DX J; DX I.) Plaintiff has not produced any evidence of information about the tailboom fin spar that was known to Bell but not conveyed to the government. Therefore, Bell has complied with the warning requirement.

Thus, the court finds that Bell has established all three *Boyle* requirements. As a result, plaintiff's charges of negligence, wantonness, violation of the AEMLD, and breach of warranty are subject to the government contractor defense and defendant Bell is entitled to judgment as a matter of law on these claims.

B. <u>Post Sale Failure to Warn</u>

Various courts have found that the government contractor defense may apply to failure to warn claims, but in this case it is not necessary for the court to resolve how to apply the *Boyle* test to plaintiffs' failure to warn claims. To the extent that Alabama law

The court notes that the applicability of the *Boyle* government contractor defense in a failure-to-warn case is uncertain. In Dorse v. Eagle-Pitcher Indus. Inc., 898 F.2d 1487, 1489 (11th Cir. 1990), the court stated that the defense is "not strictly limited to design defect cases," and that "the Boyle decision . . . is not completely meaningless in 'failure to warn' cases." Dorse resolved the dilemma of applying Boyle to a "failure to warn" case. with a two-prong test. Dorse, 898 F.2d 1489. The first prong requires that the case concern a uniquely federal interest. See id. As in Boyle, the procurement of helicopters for the United States Army is a uniquely federal interest. Under the second prong of the Dorse test, the court must address "whether a significant conflict exists between an identifiable federal policy and the operation of state law." Id. The court in Dorse determined that the pivotal question was whether the contractor could comply with both his state-prescribed duty of care and his contractual obligations. See id. If the court found that the contractor could not, the state law was displaced by the government contractor defense. See id. On the other hand, if the court found that no conflict existed between the contractor's state tort duty of care and the contractor's federal contractual duty, the court would apply state law. See id. 1489-90. Other federal appellate courts have also addressed the issue. However, not all courts have applied the same test to failure to warn claims. See Kerstetter v. Pacific Scientific Co., 210 F.3d 431, 438-39 (5th Cir. 2000); Tate v. Boeing Helicopters, 55 F.3d 1150,1156 (6th Cir. 1995); In re Hawaii Federal Asbestos Cases, 960 F.2d 806, 812-13 (9th Cir. 1992); Stout v. Borg-Warner Corp., 933 F.2d 331, 336-37 & n.2 (5th Cir. 1991); In re Joint D. & S. District New York Asbestos Litig., 897 F.2d 626, 629-30 (2d Cir. 1990); Yeroshefsky v. Unisys Corp., 962 F. Supp. 710, 718 (D. Md. 1997); but see Russek v. Unisys Corp., 921 F. Supp. 1277, 1293-

permits a claim for Bell's failure to warn the United States Army, summary judgment as to that claim is appropriate.

Plaintiffs allege that Bell not only knew of the dangers associated with the Huey, but that Bell was negligent in its failure to warn plaintiff of the dangers associated with the operation of the accident helicopter and, as a consequence of Bell's negligent failure to warn, plaintiff was injured. (Compl. at ¶ 10.) As set out above, Bell has established that they passed on to the United States any information they possessed concerning dangers presented by the helicopters' vertical fin spars. Plaintiff has produced no evidence indicating that Bell withheld any information concerning dangers associated with the vertical fin spars from the United States Army. Moreover, the Army received two warnings indicating that the vertical fin spar in the Huey's could fail. (DX I; DX J.)

On September 17, 1997, the FAA issued an Airworthiness Directive (AD), prompted by three accidents resulting from in-flight failures of the tailboom vertical fin spars on the TH-1L model (a commercial variation) and a surplus UH-1B. (DX I.) The pertinent language from the AD states:

This priority letter Airworthiness Directive (AD) is prompted by two accidents involving in-flight failures of tailboom vertical fin spars (vertical fin spars) on model TH-1L and UH-1B helicopters. One other accident occurred on a Model 205A-1 helicopter which is of similar type design. One of the accidents resulted in a fatality. As a result of these accident investigations, the FAA has determined that a large number of high-power events can cause fatigue cracks which will cause the vertical fin spar to fail. This condition, if not corrected, could result in in-flight failure of the vertical fin spar and subsequent loss of control of the helicopter.

^{94 (}D.N.J. 1996) (concluding that "where the manufacturer has established a *Boyle* defense as to the design defect, and the relevant specifications are silent as to warnings, *Boyle* bars the failure to warn claims as well").

Since an unsafe condition has been identified that is likely to exist or develop on other Bell-manufactured Model . . . UH-1H . . . helicopters of the same type design, this priority letter AD requires, . . . modification and inspection of the vertical fin spar If any crack is discovered, replacement of the vertical fin spar with an airworthy vertical fin spar is required before further flight.

(DX I at Bates 72.) (emphasis added.)

The AD specifically required a modification of the vertical tail fin so as to make the rivet holes (the danger area) in the vertical fin spar more easily inspectable and to require an inspection of that area of the vertical fin spar each eight hours the helicopter was in service. (DX I at Bates 72-73.) The FAA sent a copy of the AD to AMSCOM, the Army Agency responsible for the Huey. (DX P at 96.) The AD was studied and evaluated by the Army's Department of Aviation Engineering (DAE). (DX P at 95-97.) The Army engineers in the DAE recommended to the Assistant Project Manager for the UH-1 that the AD not be implemented. (DX P at 95-98.)

Vemmer testified that the Army's Director of Aviation Engineering and its Project Manager for the Huey helicopter, were of the collective opinion, (DX P at 94-96), that the UH-1 helicopter, as

utilized in the Army, did not fly the type of missions that were cited in the Bulletin [the Military Alert Bulletin (below) and the AD] as causing vertical fin cracking problems. The heavy lifting – heavy lift, high torque lifting type events. And that if we did, they weren't done as frequently as in the commercial arena to cause us to have a problem. Coupled with that was the fact that we had never had, to our knowledge, in reviewing all of the accident data and any database that we could find, that the Army had ever had failure of the vertical fin.

(DX P at 78.) Thus, the Army elected not to implement the AD. (DX P at 78-79.)

On April 6, 1998, Bell issued a Military Alert Bulletin ("MAB") to the Army (redbordered so as to emphasize its importance), that was specifically applicable to the UH- 1H helicopter operated by the military. (DX J; DX P at 74-77.) This MAB advised the Army that cracks had been found in the tailboom vertical fin spar which originated from the rivet holes in the spar; that the tailboom fin spar of the entire fleet of Hueys "must be inspected upon receipt of this Bulletin;" that a visual inspection of the spar assembly "must be" performed immediately and at each eight flight hours thereafter; that within twenty-five flight hours, the spar was to be inspected by tap hammer inspections, and a fluorescent penetrant inspection; and that a portion of the vertical fin skin should be cut and removed so as to make the first two rivet holes in the spar more easily inspectable. (DX J at Bates 79-86.) The Army chose not to implement this MAB based on the same reasons for its earlier rejection of the FAA's AD. (DX P at 79.) The Army was not required to follow the FAA's Airworthiness Directive, nor was it obligated to follow Bell's Military Alert Bulletin. (DX P at 88-89); see Dowd v. Textron Inc., 792 F.2d 409, 412 (4th Cir. 1986) ("it is not up to the jury to second-guess this military judgment").

The Army had operated, maintained, and overhauled the Huey for over forty years. (DX N at 50.) The Army had its own engineers and maintenance specialists. (DX R at 15, 18.) It knew better than anyone the flight spectrum used by the Army. (DX P at 217.) It had access to CCAD's overhaul records and other maintenance records that would show problems with the various components in the Huey. (DX P at 217.) The Army engineers who studied the AD and MAB were advised that CCAD had not discovered any problems, except some cracking and patching in the skin of the vertical fin of the tailbooms overhauled by it, (DX Q at 16, 19, 21), and that the Army's maintenance and quality deficiency records revealed no such failures, (DX Q at 54, 64,

78-79). The Army also had a library which contained earlier Bell Bulletins and Reports. (DX P at 198-200.)

The Army was not an "unsophisticated consumer." *See Dowd*, 792 F.2d at 412. It knew the dangers of an uncorrected fatigue crack and had been specifically advised of the possibility of a catastrophic fatigue failure at least eighteen months prior to the accident at issue in this case. (DX I.) The Army knew that fatigue cracks could develop in the vertical fin spar, which could ultimately lead to a separation of the fin and a catastrophic accident. (DX I at Bates 72.) The Army balanced the desirability of implementing the AD and Bell's MAB against the dangers of not implementing them. The following language in *Dowd* is particularly appropriate to this situation:

despite the defects alleged in this tort suit, the equipment had largely accomplished its mission and proved its military worth. . . . It may simply reflect the Army's disinclination to tinker with a system that had over time worked well enough. Whatever the reasons, it is not up to the jury to second-guess this military judgment.

Dowd, 792 F.2d at 412.

Vemmer, when asked if the Army would have implemented the MAB had Bell included a more specific statement that "[t]here's a grave risk that the tail will come off the helicopter," replied: "I don't believe our decision would have been any different. . . .I can say that I don't believe we would have implemented the Bell recommendation had they specified, similar to the FAA in their AD, that they had had separation." (DX P at 132.) Daniel J. Rubery, Deputy Commander of the Aviation and Missile Command, who, after the May 1, 1999, accident, investigated the Army's prior decision not to implement the MAB, stated emphatically that even in hindsight "[b]ased

on the data we have [through May 9, 2000], I would not have implemented" the MAB back in 1998. (DX R at 19.)

Bell specifically advised the Army of the dangers of fatigue in the spar of the vertical fin and of the dangers of fin separation. The Army elected not to implement the recommendations of the FAA and Bell, that may have prevented the accident in this case. (Supp. DX V at 226; Supp. DX U at 186-197; Supp. DX T at 53-54.) Bell cannot be held legally responsible for the Army's decision in failing to implement Bell's MAB.

(1) Plaintiff's Claim that the MAB was Inadequate

Plaintiffs assert that Bell's Military Alert Bulletin was inadequate because (1) it did not specifically state that a fatigue failure would cause separation of the vertical fin, (Pl.'s Brief at 12-13);⁸ (2) it led the Army to believe that the fin failures which had been experienced were the result of repeated heavy lifting in the logging industry, (Pl.'s Brief at 10-11); and (3) Bell did not warn the individual UH-1 pilots of such danger, (Compl. at ¶ 10).

(a) The Separation Argument

The Army's engineers certainly knew that a fatigue crack in the spar, if undetected, would ultimately cause its failure. In fact, the AD, which the Army received, studied, and elected not to implement, specifically referenced "two accidents involving

⁸ In the mid 1980's, the Army, which had begun phasing out the Huey in favor of the more advanced Blackhawk helicopter, ceased the tear down to "Bare Bones" overhauls, previously performed by CCAD on Hueys. (DX Q at 79.) The Army also sold surplus Hueys to commercial users, many of these surplus Hueys were used in the timber industry to lift logs. (DX P at 94.) This practice exposed the helicopter to "repeated heavy lift operations" ("RHLs") or frequent "torque events" involving transitions from low power to high power. (DX P at 98.)

in-flight failures of tailboom vertical fin spars." (DX I at Bates 72.) Furthermore, the Army, at the time it was considering whether to adopt Bell's MAB, knew of a UH-1 fin separation crash in Columbia in late 1997 that did not involve RHLs or logging operations. (Supp. DX T at 36-39; Supp. DX W at 103-104.) Bell warned the Army that cracks were being discovered in tailboom fin spars and that in-flight failures of tailboom vertical fin spars had occurred. (DX I; DX J.) Bell had no duty to expand its warnings that a fatigue crack in the fin spar was dangerous, to the ultimate conclusion that a crack in the vertical fin spar could cause fin separation, because the Army was aware of the dangers associated with a crack in the tailboom fin spar. (Supp. DX T at 36-37; Supp. DX W at 103-04.) See Gurley v. American Honda Motor Co., Inc., 505 So. 2d 358, 361 (Ala. 1987) ("The objective of placing a duty to warn on the manufacturers of a product is to acquaint the user of a danger of which he is aware . . . "). Thus, Bell was not required to warn that a fatigue failure would cause separation of the fin.

(b) The RHL Argument

As for the argument that Bell misled the Army into the belief that fin failures were the result of logging operations, the Military Alert Bulletin did not relate the need for such inspections and modifications to RHLs or "a large number of high power events."

(Cf. DX I at Bates 72 with DX J at Bates 79.) It clearly provided that all UH-1H helicopters "must be inspected," and noted that "cracks have been found on the tailboom vertical fin spar." (DX J at Bates 79.) Further, Vemmer stated that Bell's MAB did not limit its recommendations to units that were involved in frequent high torque or high power events. (DX P at 87-88.) Thus, Bell's warnings did not mislead the Army into

believing that fin inspection was only needed for helicopters involved in RHLs or a large number of high power events.

(c) The Failure to Warn Pilots Argument

Plaintiffs argue that Bell failed in its duty to warn individual Army pilots of this problem. Under the common law, an employer is under a duty to supply the employee with a reasonably safe place to work. Hill v. Metal Reclamation, Inc., 348 So. 2d 493, 494 (Ala. 1977) (requiring employers to provide employees with a safe place to work) (citing Woodward Iron Co. v. Craig, 53 So. 2d 586 (1951); Hardy v. City of Dothan, 176 So. 449 (1937)). "Accordingly, it is the duty of the employer to exercise reasonable care to warn the employee of any risk of harm and to acquaint him with any dangerous features of the equipment, premises, or procedures with which he works." Hill. 348 So. 2d at 494. "This includes the duty to take reasonable steps, when viewed in relation to the degree of the risk, to guard against injury to the employee from that risk." Id. Bell issued warnings to the United States Army. (DX J.) Bell was not required to issue warnings to individual Army pilots. See Purvis v. PPG Indus., Inc., 502 So. 2d 714, 720 (Ala. 1987) (holding that "[a] manufacturer is not liable if it has made reasonable efforts to convey product information and/or warnings that, because of circumstances beyond its control, were not passed on to, or were not received by, the ultimate user."). Therefore, Bell is not liable for failing to warn the individual Army pilots because it is the Army's duty to warn its employees of danger.

 $^{^{9}}$ The court notes that plaintiff was a civilian employee of the Army. (Compl. at \P 2.) A contractor has no duty to warn individual military pilots of danger, because, even if a military pilot is warned, the pilot would still be required to fly as ordered. See generally Sundstrom v. McDonnell Douglas Corp., 816 F. Supp. 587, 596-97 (N.D. Calif. 1993).

IV. Conclusion

For the foregoing reasons, the court is of the opinion that defendant Bell Helicopter Textron, Inc., is entitled to judgment as a matter of law. An order granting defendant's Motion for Summary Judgment on all of plaintiffs' claims will be entered contemporaneously with this Memorandum Opinion.

DONE this **24** day of September, 2001.

SHARON LOVELACE BLACKBURN

Sharm Coular Blackburn

United States District Judge